

This listing of claims will replace all prior version, and listings, of claims in the application:

**Listing of Claims:**

1-73. (cancelled)

74. (currently amended) A method for displaying sonic logging data associated with an earth formation surrounding a borehole, the method comprising:

acquiring sonic data at a plurality of depths in a borehole;

processing the acquired sonic data to generate a slowness-versus-frequency dispersion curve for each depth;

displaying a projection log of dispersion curve data for each depth versus depth including homogeneous and inhomogeneous characteristics of the dispersion curve data,

wherein the homogeneous and inhomogeneous characteristics are evaluated by a bandwidth of the dispersion curve data.

75-79. (cancelled)

80. (new) The method of claim 74, wherein the dispersion curve data for each depth are projected onto a slowness axis.